

0570
1017

#2

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/964,277

DATE: 10/10/2001

TIME: 13:54:55

Input Set : A:\434.app.txt

Output Set: N:\CRF3\10102001\I964277.raw

4 <110> APPLICANT: Luche, Ralf M.
5 Wei, Bo
7 <120> TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
10 <130> FILE REFERENCE: 200125.434
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/964,277
13 <141> CURRENT FILING DATE: 2001-09-25
15 <160> NUMBER OF SEQ ID NOS: 22
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 3496
21 <212> TYPE: DNA
22 <213> ORGANISM: Homo sapiens
24 <400> SEQUENCE: 1
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26 gcgagcgagg ggcgagccgc cctctcggt cgcggcggc gcctcgcaag tccgggaggc 120
27 gagggggggc cgaggggaga cgccgtgaca actttcggtt ccctctgagg gaattgggag 180
28 gtcggcgggc ccaaaagctt tcagtcaggt gtaaaagctgt tggagcgcg gagcaaagg 240
29 aaagaatgat gtaatgcgct ggctgtcca aagcatcttt tgttgtggaa tggttattcc 300
30 agtcactctt ttatgaatca aatgtgagg gctgctttgt ggacggagtc ctttgcaaga 360
31 gcacatcaac gggaaagaga aagagacatt cacttggagg gctcttgctg aaaatgggtt 420
32 taactctcct ttgcccagtc accaccagcc tgacctcata cacttttagt acaatggagt 480
33 ggctgagcct ttgagcacac caccattaca tcactgtggc aaattaaaga aggaggtggg 540
34 aaaagaggac ttattgttgt catggcccat gagatgattg gaactcaaat tgttactgag 600
35 aggttggttg ctctgctgga aagtggaaag gaaaaagtgc tgctaattga tagccggcca 660
36 ttgttggaat acaatacatc ccacattttg gaagccatta atatcaactg ctccaagctt 720
37 atgaagcgaa ggttgcaaca ggacaaagtg ttaattacag agctcatcca gcattcagcg 780
38 aaacataagg ttgacattga ttgcagtcag aaggttgtag ttacgatca aagctcccaa 840
39 gatgttgctt ctctctcttc agactgtttt ctactgtac ttctgggtaa actggagaag 900
40 agcttcaact ctgttcaact gcttgcaggt gggtttgctg agttctctcg ttgtttccct 960
41 ggcctctgtg aaggaaaatc cactctagtc cctacctgca ttctcagcc ttgcttacct 1020
42 gttgcccaaca ttgggccaac ccgaattctt cccaatcttt atcttggtg ccagcgagat 1080
43 gtccctcaaca aggagctgat gcagcagaat gggattgggt atgtgttaaa tgccagcaat 1140
44 acctgtccaa agcctgactt tatccccgag tctcatttcc tgcgtgtgcc tgtgaatgac 1200
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47 atcgctatcg cctacatcat gaagaggatg gacatgtctt tagatgaagc ttacagattt 1380
48 gtgaaagaaa aaagacctac tatactctca aacttcaatt ttctgggcca actcctggac 1440
49 tatgagaaga agattaagaa ccagactgga gcatcagggc caaagagcaa actcaagctg 1500
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54 aataagctca agcgttccct ctctctggat atcaaatcag ttcatattc agccagcatg 1800
55 gcagcatcct tacatggctt ctctcatca gaagatgctt tggaaacta caaaccttcc 1860
56 actactctgg atgggaccaa caagctatgc cagttctccc ctgttcagga actatcgag 1920
57 cagactcccg aaaccagtc tgataaggag gaagccagca tcccaagaa gctgcagacc 1980
58 gccaggcctt cagacagcca gagcaagcga ttgcattcgg tcagaaccag cagcagtggc 2040

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/964,277

DATE: 10/10/2001

TIME: 13:54:55

Input Set : A:\434.app.txt

Output Set: N:\CRF3\10102001\I964277.raw

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59 accgcccaga ggtccctttt atctccactg catcgaagtg ggagcgtgga ggacaattac 2100
60 cacaccagct tcctttttcgg cctttccacc agccagcagc acctcacgaa gtctgctggc 2160
61 ctgggcctta agggctggca ctcgatatc ttggccccc agacctctac cccttcctg 2220
62 accagcagct ggtattttgc cacagagtcc tcacattct actctgcctc agccatctac 2280
63 ggaggcagtg ccagttactc tgcctacagc tgcagccagc tgcccacttg cggagaccaa 2340
64 gtctattctg tgcgcaggcg gcagaagcca agtgacagag ctgactcgcg gcggagctgg 2400
65 catgaagaga gcccctttga aaagcagttt aaacgcagaa gctgccaaat ggaatttggg 2460
66 gagagcatca tgtcagagaa caggtcacgg gaagagctgg ggaaagtggg cagtcagtct 2520
67 agcttttcgg gcagcatgga aatcattgag gtctcctgag aagaaagaca cttgtgactt 2580
68 ctatagacaa tttttttttc ttgttcacaa aaaaattccc tgtaaactctg aaatatatat 2640
69 atgtacatac atatatattt ttggaaaatg gagctatggg gtaaaagcaa caggtggatc 2700
70 aaccagttg ttactctctt aacatctgca tttagagat cagctaatac ttctctcaac 2760
71 aaaaatggaa gggcagatgc tagaatcccc cctagacgga ggaaaacat tttattcagt 2820
72 gaattacaca tcctcttggt cttaaaaaag caagtgtctt tgggtgttga ggacaaaatc 2880
73 ccctaccatt ttccacgttg tgctactaag agatctcaaa tattagtctt tgtccggacc 2940
74 cttccatagt acaccttagc gctgagactg agccagcttg ggggtcaggt aggtagaccc 3000
75 tgttagggac agagcctagt ggtaaatacca agagaaatga tcctatccaa agctgattca 3060
76 caaaccacg ctcacctgac agccgagggg cagcagcatc actctgctgg acggaccatt 3120
77 aggggccttg ccaaggtcta ccttagagca aaccagtac ctcagacagg aaagtcgggg 3180
78 ctttgaccac taccatatct ggtagccat tttctaggca ttgtgaatag gtaggtagct 3240
79 agtcacactt ttcagaccaa ttcaaactgt ctatgcacaa aattcccgtg ggcctagatg 3300
80 gagataattt tttttcttc tcagctttat gaagagaagg gaaactgtct aggattcagc 3360
81 tgaaccacca ggaacctggc aacatcacga ttaagctaa ggttgggagg ctaacgagtc 3420
82 tactccctc tttgtaaate aaagaattgt ttaaatggg attgtcaatc ctttaataa 3480
83 agatgaactt ggtttc 3496

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85 <210> SEQ ID NO: 2

86 <211> LENGTH: 665

87 <212> TYPE: PRT

88 <213> ORGANISM: Homo sapiens

90 <400> SEQUENCE: 2

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92 1 5 10 15
93 Ala Leu Leu Glu Ser Gly Thr Glu Lys Val Leu Leu Ile Asp Ser Arg
94 20 25 30
95 Pro Phe Val Glu Tyr Asn Thr Ser His Ile Leu Glu Ala Ile Asn Ile
96 35 40 45
97 Asn Cys Ser Lys Leu Met Lys Arg Arg Leu Gln Gln Asp Lys Val Leu
98 50 55 60
99 Ile Thr Glu Leu Ile Gln His Ser Ala Lys His Lys Val Asp Ile Asp
100 65 70 75 80
101 Cys Ser Gln Lys Val Val Val Tyr Asp Gln Ser Ser Gln Asp Val Ala
102 85 90 95
103 Ser Leu Ser Ser Asp Cys Phe Leu Thr Val Leu Leu Gly Lys Leu Glu
104 100 105 110
105 Lys Ser Phe Asn Ser Val His Leu Leu Ala Gly Gly Phe Ala Glu Phe
106 115 120 125
107 Ser Arg Cys Phe Pro Gly Leu Cys Glu Gly Lys Ser Thr Leu Val Pro
108 130 135 140
109 Thr Cys Ile Ser Gln Pro Cys Leu Pro Val Ala Asn Ile Gly Pro Thr

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110 145          150          155          160
111 Arg Ile Leu Pro Asn Leu Tyr Leu Gly Cys Gln Arg Asp Val Leu Asn
112          165          170          175
113 Lys Glu Leu Met Gln Gln Asn Gly Ile Gly Tyr Val Leu Asn Ala Ser
114          180          185          190
115 Asn Thr Cys Pro Lys Pro Asp Phe Ile Pro Glu Ser His Phe Leu Arg
116          195          200          205
117 Val Pro Val Asn Asp Ser Phe Cys Glu Lys Ile Leu Pro Trp Leu Asp
118          210          215          220
119 Lys Ser Val Asp Phe Ile Glu Lys Ala Lys Ala Ser Asn Gly Cys Val
120 225          230          235          240
121 Leu Val His Cys Leu Ala Gly Ile Ser Arg Ser Ala Thr Ile Ala Ile
122          245          250          255
123 Ala Tyr Ile Met Lys Arg Met Asp Met Ser Leu Asp Glu Ala Tyr Arg
124          260          265          270
125 Phe Val Lys Glu Lys Arg Pro Thr Ile Ser Pro Asn Phe Asn Phe Leu
126          275          280          285
127 Gly Gln Leu Leu Asp Tyr Glu Lys Lys Ile Lys Asn Gln Thr Gly Ala
128          290          295          300
129 Ser Gly Pro Lys Ser Lys Leu Lys Leu Leu His Leu Glu Lys Pro Asn
130 305          310          315          320
131 Glu Pro Val Pro Ala Val Ser Glu Gly Gly Gln Lys Ser Glu Thr Pro
132          325          330          335
133 Leu Ser Pro Pro Cys Ala Asp Ser Ala Thr Ser Glu Ala Ala Gly Gln
134          340          345          350
135 Arg Pro Val His Pro Ala Ser Val Pro Ser Val Pro Ser Val Gln Pro
136          355          360          365
137 Ser Leu Leu Glu Asp Ser Pro Leu Val Gln Ala Leu Ser Gly Leu His
138          370          375          380
139 Leu Ser Ala Asp Arg Leu Glu Asp Ser Asn Lys Leu Lys Arg Ser Phe
140 385          390          395          400
141 Ser Leu Asp Ile Lys Ser Val Ser Tyr Ser Ala Ser Met Ala Ala Ser
142          405          410          415
143 Leu His Gly Phe Ser Ser Ser Glu Asp Ala Leu Glu Tyr Tyr Lys Pro
144          420          425          430
145 Ser Thr Thr Leu Asp Gly Thr Asn Lys Leu Cys Gln Phe Ser Pro Val
146          435          440          445
147 Gln Glu Leu Ser Glu Gln Thr Pro Glu Thr Ser Pro Asp Lys Glu Glu
148          450          455          460
149 Ala Ser Ile Pro Lys Lys Leu Gln Thr Ala Arg Pro Ser Asp Ser Gln
150 465          470          475          480
151 Ser Lys Arg Leu His Ser Val Arg Thr Ser Ser Ser Gly Thr Ala Gln
152          485          490          495
153 Arg Ser Leu Leu Ser Pro Leu His Arg Ser Gly Ser Val Glu Asp Asn
154          500          505          510
155 Tyr His Thr Ser Phe Leu Phe Gly Leu Ser Thr Ser Gln Gln His Leu
156          515          520          525
157 Thr Lys Ser Ala Gly Leu Gly Leu Lys Gly Trp His Ser Asp Ile Leu
158          530          535          540

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159 Ala Pro Gln Thr Ser Thr Pro Ser Leu Thr Ser Ser Trp Tyr Phe Ala
160 545 550 555 560
161 Thr Glu Ser Ser His Phe Tyr Ser Ala Ser Ala Ile Tyr Gly Gly Ser
162 565 570 575
163 Ala Ser Tyr Ser Ala Tyr Ser Cys Ser Gln Leu Pro Thr Cys Gly Asp
164 580 585 590
165 Gln Val Tyr Ser Val Arg Arg Arg Gln Lys Pro Ser Asp Arg Ala Asp
166 595 600 605
167 Ser Arg Arg Ser Trp His Glu Glu Ser Pro Phe Glu Lys Gln Phe Lys
168 610 615 620
169 Arg Arg Ser Cys Gln Met Glu Phe Gly Glu Ser Ile Met Ser Glu Asn
170 625 630 635 640
171 Arg Ser Arg Glu Glu Leu Gly Lys Val Gly Ser Gln Ser Ser Phe Ser
172 645 650 655
173 Gly Ser Met Glu Ile Ile Glu Val Ser
174 660 665
177 <210> SEQ ID NO: 3
178 <211> LENGTH: 156
179 <212> TYPE: PRT
180 <213> ORGANISM: Homo sapiens
182 <400> SEQUENCE: 3
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184 1 5 10 15
185 Leu Pro Phe Leu Tyr Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp
186 20 25 30
187 Val Leu Glu Glu Phe Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn
188 35 40 45
189 Leu Pro Asn Leu Phe Glu Asn Ala Gly Glu Phe Lys Tyr Lys Gln Ile
190 50 55 60
191 Pro Ile Ser Asp His Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu
192 65 70 75 80
193 Ala Ile Ser Phe Ile Asp Glu Ala Arg Gly Lys Asn Cys Gly Val Leu
194 85 90 95
195 Val His Cys Leu Ala Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala
196 100 105 110
197 Tyr Leu Met Gln Lys Leu Asn Leu Ser Met Asn Asp Ala Tyr Asp Ile
198 115 120 125
199 Val Lys Met Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly
200 130 135 140
201 Gln Leu Leu Asp Phe Glu Arg Thr Leu Gly Leu Ser
202 145 150 155
205 <210> SEQ ID NO: 4
206 <211> LENGTH: 156
207 <212> TYPE: PRT
208 <213> ORGANISM: Homo sapiens
210 <400> SEQUENCE: 4
211 Asp Gly Ser Pro Val Pro Ser Ser Gln Pro Ala Phe Pro Val Gln Ile
212 1 5 10 15
213 Leu Pro Tyr Leu Tyr Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp

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```

214          20          25          30
215 Val Leu Gly Lys Tyr Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn
216          35          40          45
217 Leu Pro Asn Ala Phe Glu His Gly Gly Glu Phe Thr Tyr Lys Gln Ile
218          50          55          60
219 Pro Ile Ser Asp His Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu
220 65          70          75          80
221 Ala Ile Ser Phe Ile Asp Glu Ala Arg Ser Lys Lys Cys Gly Val Leu
222          85          90          95
223 Val His Cys Leu Ala Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala
224          100          105          110
225 Tyr Leu Met Gln Lys Met Asn Leu Ser Leu Asn Asp Ala Tyr Asp Phe
226          115          120          125
227 Val Lys Arg Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly
228          130          135          140
229 Gln Leu Leu Asp Phe Glu Arg Thr Leu Gly Leu Ser
230 145          150          155
233 <210> SEQ ID NO: 5
234 <211> LENGTH: 156
235 <212> TYPE: PRT
236 <213> ORGANISM: Homo sapiens
238 <400> SEQUENCE: 5
239 Ala Thr Pro Pro Val Gly Leu Arg Ala Ser Phe Pro Val Gln Ile
240 1          5          10          15
241 Leu Pro Asn Leu Tyr Leu Gly Ser Ala Arg Asp Ser Ala Asn Leu Glu
242          20          25          30
243 Ser Leu Ala Lys Leu Gly Ile Arg Tyr Ile Leu Asn Val Thr Pro Asn
244          35          40          45
245 Leu Pro Asn Phe Phe Glu Lys Asn Gly Asp Phe His Tyr Lys Gln Ile
246          50          55          60
247 Pro Ile Ser Asp His Trp Ser Gln Asn Leu Ser Arg Phe Phe Pro Glu
248 65          70          75          80
249 Ala Ile Glu Phe Ile Asp Glu Ala Leu Ser Gln Asn Cys Gly Val Leu
250          85          90          95
251 Val His Cys Leu Ala Gly Val Ser Arg Ser Val Thr Val Thr Val Ala
252          100          105          110
253 Tyr Leu Met Gln Lys Leu His Leu Ser Leu Asn Asp Ala Tyr Asp Leu
254          115          120          125
255 Val Lys Arg Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly
256          130          135          140
257 Gln Leu Leu Asp Phe Glu Arg Ser Leu Arg Leu Glu
258 145          150          155
261 <210> SEQ ID NO: 6
262 <211> LENGTH: 155
263 <212> TYPE: PRT
264 <213> ORGANISM: Homo sapiens
266 <400> SEQUENCE: 6
267 Leu Ser Gln Pro Cys Leu Pro Val Pro Ser Val Gly Leu Thr Arg Ile
268 1          5          10          15

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/964,277

DATE: 10/10/2001

TIME: 13:54:56

Input Set : A:\434.app.txt

Output Set: N:\CRF3\10102001\I964277.raw

L:12 M:270 C: Current Application Number differs, Wrong Format